

Copy filed to Applicant

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/577,613
Source: TEWP
Date Processed by STIC: 05/11/2006

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: _____

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.

- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped
 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000

- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)

- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown."
 Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules

- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWP

RAW SEQUENCE LISTING

DATE: 05/11/2006

PATENT APPLICATION: US/10/577,613

TIME: 11:18:49

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

3 <110> APPLICANT: Alexander, Cherkasky
 5 <120> TITLE OF INVENTION: PCT/IB 2004/003536: CHERKASKY FUSION PROTEINS CONTAINING ANTIBODY-

6 ANTIGEN - AND MICROTUBULE - BINDING REGIONS AND IMMUNE RESPONSE - TRIGGERIND
 7 REGIONS
 9 <130> FILE REFERENCE: -

11 <140> CURRENT APPLICATION NUMBER: US/10/577,613

11 <141> CURRENT FILING DATE: 2006-04-28

11 <160> NUMBER OF SEQ ID NOS: 14

13 <170> SOFTWARE: PatentIn version 3.3

15 <210> SEQ ID NO: 1

16 <211> LENGTH: 676

17 <212> TYPE: PRT

18 <213> ORGANISM: Artificial sequence

20 <220> FEATURE:

20 <223> OTHER INFORMATION:

20 <400> 1

22 Ala Ala Gln His Asp Glu Ala Gln Gln Asn Ala Phe Tyr Gln Val Leu
 23 1 5 10 15
 26 Asn Met Pro Asn Leu Asn Ala Asp Gln Arg Asn Gly Phe Ile Gln Ser
 27 20 25 30
 30 Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Val Leu Gly Glu Ala Lys
 31 35 40 45
 34 Lys Leu Asn Glu Ser Gln Ala Pro Lys Ala Asp Asn Asn Phe Asn Lys
 35 50 55 60
 38 Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu Asn Met Pro Asn Leu Asn
 39 65 70 75 80
 42 Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser
 43 85 90 95
 46 Gln Ser Ala Asn Leu Leu Ser Glu Ala Lys Lys Leu Asn Glu Ser Gln
 47 100 105 110
 50 Ala Pro Lys Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe
 51 115 120 125
 54 Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly
 55 130 135 140
 58 Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu
 59 145 150 155 160
 62 Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Asp Asn
 63 165 170 175
 66 Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu
 67 180 185 190
 70 Pro Asn Leu Thr Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys
 71 195 200 205
 74 Asp Asp Pro Ser Val Ser Lys Glu Ile Leu Ala Glu Ala Lys Lys Leu

(pg-6)
 Does Not Comply
 Corrected Diskette Needed

pg-1, 2, 4, 5
 Responses are Artificial
 or Unknown. P/s Explain the
 Source of Genetic Material.
 See Item # 11
 on Error
 Summary
 Sheet.

RAW SEQUENCE LISTING

DATE: 05/11/2006

PATENT APPLICATION: US/10/577,613

TIME: 11:18:49

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

```

75      210      215      220
78 Asn Asp Ala Gln Ala Pro Lys Glu Glu Asp Asn Asn Lys Pro Gly Lys
79 225      230      235      240
82 Glu Asp Gly Asn Lys Pro Gly Lys Glu Asp Gly Asn Gly Gly Gly Gly
83      245      250      255
86 Gly Met Ser Pro Phe Pro Leu Thr Ser Met Asp Lys Ala Phe Ile Thr
87      260      265      270
90 Val Leu Glu Met Thr Pro Val Leu Gly Thr Glu Ile Ile Asn Tyr Arg
91      275      280      285
94 Asp Gly Met Gly Arg Val Leu Ala Gln Asp Val Tyr Ala Lys Asp Asn
95      290      295      300
98 Leu Pro Pro Phe Pro Ala Ser Val Lys Asp Gly Tyr Ala Val Arg Ala
99 305      310      315      320
102 Ala Asp Gly Pro Gly Asp Arg Phe Ile Ile Gly Glu Ser Gln Ala Gly
103      325      330      335
106 Glu Gln Pro Thr Gln Thr Val Met Pro Gly Gln Val Met Arg Val Thr
107      340      345      350
110 Thr Gly Ala Pro Ile Pro Cys Gly Ala Asp Ala Val Val Gln Val Glu
111      355      360      365
114 Asp Thr Glu Leu Ile Arg Glu Ser Asp Asp Gly Thr Glu Glu Leu Glu
115      370      375      380
118 Val Arg Ile Leu Val Gln Ala Arg Pro Gly Gln Asp Ile Arg Pro Ile
119 385      390      395      400
122 Gly His Asp Ile Lys Arg Gly Glu Cys Val Leu Ala Lys Gly Thr His
123      405      410      415
126 Met Gly Pro Ser Glu Ile Gly Leu Leu Ala Thr Val Gly Val Thr Glu
127      420      425      430
130 Val Glu Val Asn Lys Phe Pro Val Val Ala Val Met Ser Thr Gly Asn
131      435      440      445
134 Glu Leu Leu Asn Pro Glu Asp Asp Leu Leu Pro Gly Lys Ile Arg Asp
135      450      455      460
138 Ser Asn Arg Ser Thr Leu Leu Ala Thr Ile Gln Glu His Gly Tyr Pro
139 465      470      475      480
142 Thr Ile Asn Leu Gly Ile Val Gly Asp Asn Pro Asp Asp Leu Leu Asn
143      485      490      495
146 Ala Leu Asn Glu Gly Ile Ser Arg Ala Asp Val Ile Ile Thr Ser Gly
147      500      505      510
150 Gly Val Ser Met Gly Glu Lys Asp Tyr Leu Lys Gln Val Leu Asp Ile
151      515      520      525
154 Asp Leu His Ala Gln Ile His Phe Gly Arg Val Phe Met Lys Pro Gly
155      530      535      540
158 Leu Pro Thr Thr Phe Ala Thr Leu Asp Ile Asp Gly Val Arg Lys Ile
159 545      550      555      560
162 Ile Phe Ala Leu Pro Gly Asn Pro Val Ser Ala Val Val Thr Cys Asn
163      565      570      575
166 Leu Phe Val Val Pro Ala Leu Arg Lys Met Gln Gly Ile Leu Asp Pro
167      580      585      590
170 Arg Pro Thr Ile Ile Lys Ala Arg Leu Ser Cys Asp Val Lys Leu Asp
171      595      600      605

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/577,613

DATE: 05/11/2006
TIME: 11:18:49

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\05112006\J577613.raw

174 Pro Arg Pro Glu Tyr His Arg Cys Ile Leu Thr Trp His His Gln Glu
175 610 615 620
178 Pro Leu Pro Trp Ala Gln Ser Thr Gly Asn Gln Met Ser Ser Arg Leu
179 625 630 635 640
182 Met Ser Met Arg Ser Ala Asn Gly Leu Leu Met Leu Pro Pro Lys Thr
183 645 650 655
186 Glu Gln Tyr Val Glu Leu His Lys Gly Glu Val Val Asp Val Met Val
187 660 665 670
190 Ile Gly Arg Leu
191 675

194 <210> SEQ ID NO: 2

195 <211> LENGTH: 2092

196 <212> TYPE: DNA

C--> 197 <213> ORGANISM: Artificial sequence

N--> 199 <220> FEATURE:

N--> 199 <223> OTHER INFORMATION:

N--> 199 <400> 2

200 tgctgcgcaa cacgatgaag ctcaacaaaa cgctttttat caagtcttaa atatgcctaa 60
202 cttaaatgct gatcaacgca atgggtttat ccaaagcctt aaagatgac caagccaaag 120
204 tgctaacggt ttaggtgaag ctaaaaaatt aaacgaatct caagcaccga aagctgacaa 180
206 caatttcaac aaagaacaac aaaaatgctt ctatgaaatc ttgaacatgc ctaacttgaa 240
208 cgaagaacaa cgcaatgggt tcacccaaag cttaaaagat gacccaagtc aaagtgctaa 300
210 cctattgtca gaagctaaaa agttaaatga atctcaagca ccgaaagcgg ataacaaatt 360
212 caacaaagaa caacaaaatg ctttctatga aatcttacct ttacctaaact taaacgaaga 420
214 acaacgcaat ggtttcatcc aaagcctaaa agatgaccca agccaaagcg ctaacctttt 480
216 agcagaagct aaaaagctaa atgatgcaca agcaccacaa gctgacaaca aattcaacaa 540
218 agaacaacaa aatgctttct atgaaatttt acatttacct aacttaactg aagagcaacg 600
220 taacgggcttc atccaaagcc ttaaagacga tccttcagtg agcaaagaaa ttttagcaga 660
222 agctaaaaag ctaaacgatg ctcaagcacc aaaagaggaa gacaacaaca aacctggtaa 720
224 agaagacggc aacaaacctg gcaaagaaga cggtaacggc ggcggcggcg gcgtttaggt 780
226 cacagtgtcg tcgatattac caaggtggcg agaagacatc gcatgtctcc tttcctctg 840
228 acatctatgg acaaaagcct tatcacagtc ctggagatga ctccgggtgct tgggacagaa 900
230 atcatcaatt accgagatgg aatggggcga gtccttgctc aagatgtata tgcaaaagac 960
232 aatttaccct ccttcccagc atcagtaaaa gatggctatg ctgtccgagc tgctgatggc 1020
234 ccaggagatc gtttcatcat tggggaatcc caagctgggtg aacagccaac tcagacagta 1080
236 atgccaggac aagtcatgcg ggttacaaca ggtgctccaa taccctgcgg tgctgatgca 1140
238 gtagtacaag tggaagatac cgaacttacc agggaaatcag atgatggcac tgaagaactt 1200
240 gaagtgcgaa ttctggtgca agtcgggcca ggccaagata tcagacccat cggccatgac 1260
242 attaaaagag ggggaatgtg tttggccaaa ggaacccaca tgggccccctc agagattggt 1320
244 cttctggcaa ctgtaggtgt cacagagggt gaagttaata agtttccagt ggttgcagtc 1380
246 atgtcaacag ggaatgagct gctaaatcct gaagatgacc tcttaccagg gaagattcga 1440
248 gacagcaatc gttcaactct tctagcaaca attcaggaac atgggttacc cactgatcaac 1500
250 ttgggtattg taggagacaa cccagatgac ttactcaatg ccttgaatga gggatatcagt 1560
252 cgtgctgatg tcatcatcac atcagggggg gtatccatgg gggaaaagga ctatctcaag 1620
254 caggtgctgg acattgatct tcatgctcag atccattttg gcagggtttt tatgaaacca 1680
256 ggcttgccaa caacatttgc aactttggat attgatgggt taagaaaaat aatctttgca 1740
258 ctacctggga atcctgtatc ggctgtgggt acctgcaatc tctttgttgt gcctgcaactg 1800
260 aggaaaatgc agggcatctt ggatcctcgg ccaaccatca tcaaagcaag gttatcatgt 1860
262 gatgtaaaac ttgatcctcg tccagaatac catcggtgta tactaacttg gcatcaccaa 1920

Same Error

RAW SEQUENCE LISTING

DATE: 05/11/2006

PATENT APPLICATION: US/10/577,613

TIME: 11:18:49

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

264 gaaccactac cttgggcaca gactacaggt aatcaaatga gcagccgtct gatgagcatg 1980
 266 cgcaagtgcc atggattggt gatgctacct ccaaagacag aacagtacgt ggagctccac 2040
 268 aaaggcgagg tgggtgatgt catggctcatt ggacggctat gatggtcacc ag 2092

271 <210> SEQ ID NO: 3

272 <211> LENGTH: 300

273 <212> TYPE: PRT

274 <213> ORGANISM: Artificial sequence

277 <220> FEATURE:

278 <221> NAME/KEY: misc_feature

279 <222> LOCATION: (264)..(264)

280 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid

282 <220> FEATURE:

283 <221> NAME/KEY: misc_feature

284 <222> LOCATION: (278)..(278)

285 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid

287 <220> FEATURE:

288 <221> NAME/KEY: misc_feature

289 <222> LOCATION: (281)..(281)

290 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid

292 <400> SEQUENCE: 3

294 Ala Ala Gln His Asp Glu Ala Gln Gln Asn Ala Phe Tyr Gln Val Leu

295 1 5 10 15

298 Asn Met Pro Asn Leu Asn Ala Asp Gln Arg Asn Gly Phe Ile Gln Ser

299 20 25 30

302 Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Val Leu Gly Glu Ala Lys

303 35 40 45

306 Lys Leu Asn Glu Ser Gln Ala Pro Lys Ala Asp Asn Asn Phe Asn Lys

307 50 55 60

310 Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu Asn Met Pro Asn Leu Asn

311 65 70 75 80

314 Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser

315 85 90 95

318 Gln Ser Ala Asn Leu Leu Ser Glu Ala Lys Lys Leu Asn Glu Ser Gln

319 100 105 110

322 Ala Pro Lys Ala Asp Asn Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe

323 115 120 125

326 Tyr Glu Ile Leu His Leu Pro Asn Leu Asn Glu Glu Gln Arg Asn Gly

327 130 135 140

330 Phe Ile Gln Ser Leu Lys Asp Asp Pro Ser Gln Ser Ala Asn Leu Leu

331 145 150 155 160

334 Ala Glu Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ala Asp Asn

335 165 170 175

338 Lys Phe Asn Lys Glu Gln Gln Asn Ala Phe Tyr Glu Ile Leu His Leu

339 180 185 190

342 Pro Asn Leu Thr Glu Glu Gln Arg Asn Gly Phe Ile Gln Ser Leu Lys

343 195 200 205

346 Asp Asp Pro Ser Val Ser Lys Glu Ile Leu Ala Glu Ala Lys Lys Leu

347 210 215 220

350 Asn Asp Ala Gln Ala Pro Lys Glu Glu Asp Asn Asn Lys Pro Gly Lys

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/577,613

DATE: 05/11/2006
TIME: 11:18:49

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\05112006\J577613.raw

```

351 225          230          235          240
354 Glu Asp Gly Asn Lys Pro Gly Lys Glu Asp Gly Asn Gly Gly Gly Gly
355          245          250          255
W--> 358 Gly Ala Ala Ala Ser Thr Ala Xaa Ala Ser Thr Ala Lys Glu Thr Ala
359          260          265          270
W--> 362 Glu Ala Val Ala Asp Xaa Ile Leu Xaa Lys Ala Gly Pro Leu Val Ala
363          275          280          285
366 Val Ser Ala Val Ala Leu Asp Ile Thr Ala Tyr Pro
367          290          295          300
370 <210> SEQ ID NO: 4
371 <211> LENGTH: 912
372 <212> TYPE: DNA
C--> 373 <213> ORGANISM: Artificial sequence
376 <220> FEATURE:
377 <221> NAME/KEY: misc_feature
378 <222> LOCATION: (792)..(792)
379 <223> OTHER INFORMATION: n is a, c, g, t or u
381 <220> FEATURE:
382 <221> NAME/KEY: misc_feature
383 <222> LOCATION: (835)..(835)
384 <223> OTHER INFORMATION: n is a, c, g, t or u
386 <220> FEATURE:
387 <221> NAME/KEY: misc_feature
388 <222> LOCATION: (844)..(844)
389 <223> OTHER INFORMATION: n is a, c, g, t or u
391 <400> SEQUENCE: 4
392 tgctgcgcaa cacgatgaag ctcaacaaaa cgcttttttat caagtcttaa atatgcctaa 60
394 cttaaatgct gatcaacgca atgggttttat ccaaagcctt aaagatgata caagccaaag 120
396 tgctaacgtt ttaggtgaag ctaaaaaatt aaacgaatct caagcaccga aagctgacaa 180
398 caatttcaac aaagaacaac aaaatgcttt ctatgaaatc ttgaacatgc ctaacttgaa 240
400 cgaagaacaa cgcaatgggt tcatacctaaag cttaaaagat gacccaagtc aaagtgtctaa 300
402 cctattgtca gaagctaaaa agttaaatga atctcaagca ccgaaagcgg ataacaaatt 360
404 caacaaagaa caacaaaatg ctttctatga aatcttacat ttacctaaact taaacgaaga 420
406 acaacgcaat ggtttcatcc aaagcctaaa agatgaccca agccaaagcg ctaacctttt 480
408 agcagaagct aaaaagctaa atgatgcaca agcaccacaaa gctgacaaca aattcaacaa 540
410 agaacaacaa aatgctttct atgaaatttt acattttacct aacttaactg aagagcaacg 600
412 taacggcttc atccaaagcc ttaaagacga tccttcagtg agcaaagaaa ttttagcaga 660
414 agctaaaaag ctaaaacgat ctcaagcacc aaaagaggaa gacaacaaca aacctggtaa 720
416 agaagacggc aacaaacctg gcaaagaaga cggtaacggc ggcgggcgcg gcgcgggcgc 780
W--> 418 gtcgaccgcg gncgcgtcga cggcaaagga gactgctgag gctgttgctg atganatact 840
W--> 420 gganaaggct gggccacttg ttgctgtgtc tgctgttgca cttgatataa ctgcctaccc 900
422 ctaaaagcca aa 912
425 <210> SEQ ID NO: 5
426 <211> LENGTH: 3718
427 <212> TYPE: DNA
C--> 428 <213> ORGANISM: Artificial sequence
W--> 430 <220> FEATURE:
W--> 430 <223> OTHER INFORMATION:
W--> 430 <400> 5

```

The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/11/2006
PATENT APPLICATION: US/10/577,613 TIME: 11:18:50

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\05112006\J577613.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 264,278,281

Seq#:4; N Pos. 792,835,844

Seq#:8; N Pos. 488,531,540

Seq#:9; N Pos. 440,483,492

Seq#:12; N Pos. 792,835,844

Use of <220> Feature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Seq#:1,2,5,6,7,10,11,13,14

VERIFICATION SUMMARY

DATE: 05/11/2006

PATENT APPLICATION: US/10/577,613

TIME: 11:18:50

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
 L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:18 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
 L:20 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:1, <213>
 ORGANISM:Artificial Sequence
 L:20 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:1, <213>
 ORGANISM:Artificial Sequence
 L:20 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:20
 L:197 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
 L:199 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:2, <213>
 ORGANISM:Artificial Sequence
 L:199 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:2, <213>
 ORGANISM:Artificial Sequence
 L:199 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:199
 L:274 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
 L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:256
 L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:272
 L:373 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
 L:418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:780
 L:420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:840
 L:428 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
 L:430 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:5, <213>
 ORGANISM:Artificial Sequence
 L:430 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:5, <213>
 ORGANISM:Artificial Sequence
 L:430 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:430
 L:559 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
 L:561 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:6, <213>
 ORGANISM:Artificial Sequence
 L:561 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:6, <213>
 ORGANISM:Artificial Sequence
 L:561 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:6,Line#:561
 L:652 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
 L:654 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:7, <213>
 ORGANISM:Artificial Sequence
 L:654 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:7, <213>
 ORGANISM:Artificial Sequence
 L:654 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:654
 L:743 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
 L:778 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:480
 L:812 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
 L:845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:420
 L:847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:480
 L:881 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
 L:883 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:10, <213>
 ORGANISM:Artificial Sequence
 L:883 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:10, <213>
 ORGANISM:Artificial Sequence
 L:883 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:10,Line#:883
 L:1028 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
 L:1030 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:11, <213>
 ORGANISM:Artificial Sequence
 L:1030 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:11, <213>

ORGANISM:Artificial Sequence

L:1030 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:1030

L:1173 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12

L:1218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:780

L:1220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:840

L:1252 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13

L:1254 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:13, <213>

ORGANISM:Artificial Sequence

L:1254 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:13, <213>

ORGANISM:Artificial Sequence

L:1254 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:1254

VERIFICATION SUMMARY

DATE: 05/11/2006

PATENT APPLICATION: US/10/577,613

TIME: 11:18:50

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\05112006\J577613.raw

L:1355 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14

L:1357 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:14, <213>

ORGANISM:Artificial Sequence

L:1357 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:14, <213>

ORGANISM:Artificial Sequence

L:1357 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:14,Line#:1357